

# CALIFORNIA DROUGHT UPDATE

## DECEMBER 19, 2022

### Current Conditions

- The state's new water year began October 1, and with it came fresh concerns about a fourth year of extreme drought. The three-year period from 2020 to 2022 is now the driest on record going back to 1896.
- Despite some rain and mountain snowfall in early November and early December, long-range forecasting suggests warmer and drier-than-average conditions will persist.
- Right now, California's snowpack is 223 percent of normal for this date (Dec. 12). But, for every day it does not snow, that number will tick down. Last year, California experienced a great December and ended 2021 with 157 percent of average snow for that time of year. But that bounty disappeared following the driest January, February, and March on record.
- To replace and replenish the water that thirstier soils, vegetation, and the atmosphere will consume under hotter and drier conditions, Governor Newsom in August released "California's Water Supply Strategy, Adapting to a Hotter, Drier Future" with actions to recycle, de-salt and conserve more water and expand water storage capacity.
- All of California's 58 counties are under a drought emergency proclamation. Californians are being asked to reduce their water use by 15 percent over 2020 levels to protect water reserves and help maintain critical flows for fish and wildlife wherever possible.
- As of December 19, the state's voluntary household dry well reporting system received reports of 65 dry wells in the past 30 days. Most are in Tehama County.

*The California Drought Update is a weekly roundup of conditions, state actions and upcoming developments. It is produced by an interagency team that includes the California Natural Resources Agency, the California Environmental Protection Agency, the Governor's Office of Emergency Services, the California Department of Food and Agriculture, the Department of Water Resources, the Department of Fish and Wildlife, the State Water Resources Control Board and the Department of Public Health. For the latest on drought, please visit <https://drought.ca.gov>. For tips and resources for conserving water, please visit [www.saveourwater.com](http://www.saveourwater.com).*

## Recent Events and State Actions

### **Fallowing program (LandGroundwater digital platform to help address dry wells and water supply shortages (Dec. 20):**

The Department of Water Resources (DWR) announced, along with state, federal and non-governmental organization partners, advancing development of a tool for groundwater agencies to help with efforts to prevent dry wells and water supply shortages. The innovative Groundwater Accounting Platform is a robust state-supported data tool that will enable groundwater sustainability agencies (GSAs) across California to track water availability and use. Groundwater, which is water naturally stored in the ground, serves as the State's water savings account during dry years when less surface water is available. Nearly 85 percent of all Californians rely on groundwater for some portion of their water supply, particularly underserved communities in the Central Valley.



### **Salton Sea MOU signed at Colorado River meeting (Dec. 16):**

At the annual meeting of the Colorado River Water Users Association in Las Vegas, the California Secretary for Natural Resources and representatives of the Department of the Interior, Imperial Irrigation District, and Coachella Valley Water District signed and celebrated an agreement that will invest \$250 million in federal funds to mitigate drought impacts at the Salton Sea. The agreement will expedite implementation of the state's 10-year Salton Sea plan and enable urgent water conservation needed to protect Colorado River reservoir storage volumes amid persistent climate change-driven drought conditions. The federal investment complements the \$583 million in state funding committed to date for projects to suppress dust and restore aquatic habitat at the hyper-saline lake. The Salton Sea is a source of food for millions of migratory birds, but its exposed shoreline generates particulate air pollution that endangers nearby communities.



### **Feather River Fish Hatchery to increase production of fall-run chinook salmon (Dec. 16):**

The California Department of Fish and Wildlife (CDFW) and the California Department of Water Resources (DWR) announced that the Feather River Fish Hatchery in Oroville will increase its production of fall-run chinook salmon in 2023 to approximately 9.5 million fish to combat the impacts of drought and a thiamine deficiency affecting natural spawning and in-river production. It is the second consecutive year the hatchery will exceed its typical production quota of six million fall-run chinook salmon to help sustain California's commercial and recreational salmon fisheries. The hatchery raised and released eight million fall-run chinook salmon smolts in 2022. In the past few years, California's chinook salmon populations have suffered from a thiamine deficiency, which is a lack of thiamine or Vitamin B1, which can cause death in both juvenile and adult fish. The thiamine deficiency has been linked to booming anchovy populations in the ocean and adult salmon feeding almost exclusively on anchovies compared to a more diverse diet of prey species. CDFW and DWR have been able to successfully treat both adult salmon returning to the Feather River Fish Hatchery and the fertilized eggs produced there. Until there are changes in the ocean food web, thiamine deficiency will continue to be a problem for these fish.



## Recent Events and State Actions

**Regional drought emergency for all of Southern California (Dec. 14):** Metropolitan Water District of Southern California's Board of Directors adopted a resolution reaffirming a regional drought emergency for its entire service area and calling on all its member agencies to reduce use of State Water Project (SWP) and Colorado River supplies. In adopting the resolution, the board warned the water-saving call could become mandatory if drought conditions persist in the coming months. This continues a resolution adopted last year that applied just to the SWP-dependent portions of the service area.

**Webinar on drought planning for state small water systems and domestic wells (Dec. 14):** DWR hosted the fourth of four webinars to inform and solicit input from interested parties on the development of a guidebook to support the preparation of County Drought Resilience Plans, which focus on state small water systems and domestic wells as required under SB 552, the 2020 legislation that requires drought planning by operators of systems with fewer than 3,000 connections. DWR reviewed and solicited feedback on the full set of chapters of the draft Guidebook that will be subject to public comment through January 10.

**Curtailment adjustments (ongoing):** The State Water Board continues to monitor six critical watersheds where conditions may threaten water supplies. Due to precipitation in late November and early December, nearly all curtailments have been lifted in the [Delta watershed](#) and [Shasta River watershed](#). All curtailments have been lifted in the [Russian River watershed](#) through December 31. Curtailments remain in effect in the [Scott River watershed](#). Board staff will continue to adjust curtailment orders as conditions change. Water rights holders should closely monitor their email and the [watershed drought webpages](#) for curtailment updates.



## Tribal / Local Actions

- **Tribal governments:** Tribal emergency drought proclamations as reported by Cal OES to date: Buena Vista Rancheria of Me-Wuk Indians, Karuk Tribe, Resighini Rancheria, Tule River Indian Tribe, Yocha Dehe Wintun Nation, Yurok Tribe, Wiyot Tribe.
- **Local government:** Local emergency drought proclamations as reported by Cal OES to date: Butte, Colusa, Fresno, Glenn, Humboldt, Lake, Madera, Marin, Mendocino, Modoc, Napa, Nevada, San Joaquin, San Luis Obispo, Santa Barbara, Santa Clara, Siskiyou, Sonoma, Tulare, Tuolumne, Yolo.

## Upcoming Decisions / Milestones

**First snowpack survey at Phillips Station:** On **Jan. 3**, DWR will conduct the first snow survey of the season at Echo Summit, approximately 7,000 feet elevation in the Sierra Nevada. The statewide snowpack is currently about 200 percent of average.

**Urban water conservation rates in November:** In **mid-January**, the State Water Resources Control Board is expected to hear a report on urban water consumption in November 2022 compared to December 2020.

## Key Data Points and Resources

- Daily Hydrological & Climate Information summary: <http://cdec.water.ca.gov/reportapp/javareports?name=DLYHYDRO>
- Statewide water conditions: [http://cdec.water.ca.gov/water\\_cond.html](http://cdec.water.ca.gov/water_cond.html)
- Daily Reservoir Storage Summary: <https://cdec.water.ca.gov/reservoir.html>
- Water Year Forecast and Monthly Distribution: <http://cdec.water.ca.gov/reportapp/javareports?name=B120DIST>
- Monthly water supplier reports on water production and conservation: [https://www.waterboards.ca.gov/water\\_issues/programs/conservation\\_portal/conservation\\_reporting.html](https://www.waterboards.ca.gov/water_issues/programs/conservation_portal/conservation_reporting.html)
- Latest groundwater conditions and information: <https://sgma.water.ca.gov/CalGWLlive/>
- Information on state drought actions and assistance: <https://drought.ca.gov/>
- Conservation tips and resources for consumers: <https://saveourwater.com/>